

### **REMARKS/ARGUMENTS**

Reconsideration of the present application is respectfully requested. Claims 1-20 have been cancelled, and claims 21-23 have been added as new claims. Claims 21-23 have been added to comply with the restriction requirement made on April 12, 2002, so now all pending claims are directed to the combination of permethrin and imidacloprid.

### **Information Disclosure Statement**

Applicants will submit a proper information disclosure statement that complies with 37 C.F.R. § 1.98(b) as requested by the Examiner.

### **Double Patenting Rejection**

In the Office Action, the Examiner issued a provisional double patenting rejection against claims 9-12 and 16-17 over claims 4-7 of U.S. Patent Application No. 10/682,127 to Sirinyan et al. Since neither the '127 application nor this application have had claims allowed yet, Applicants respectfully request that this rejection be held in abeyance until subject matter is deemed allowable.

### **Rejections based on 35 U.S.C. § 103(a)**

Title 35 U.S.C. § 103(a) declares that a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere*

*Co.*, 383 U.S. 1 (1966). To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason, suggestion, or motivation found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. *See Application of Bergel*, 292 F. 2d 955, 956–57 (Fed. Cir. 1961).

Recently, the Supreme Court emphasized that the standard for obviousness is not rigid and should not be applied as such. *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007). Instead, if the common sense of those skilled in the art could demonstrate why some combinations would have been obvious where others would not, then a claim can be found obvious even without an explicit teaching, suggestion, or motivation. As the Court stated in *KSR*, “it will be necessary for [the Office] to look at interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by [one of] ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the [patent application].” *Id.*, at 1140–41 .

Claims 9-12 and 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,232,328 to Dorn et al. (“Dorn”). Specifically, the Examiner contends that these claims were rejected because Dorn teaches the combination of pyrethroids and nicotinylic compound for the control of parasitic insects. Claims 9-12 and 16-17 were further rejected under 35 U.S.C. § 103(a) as being unpatentable over Dorn in combination with U.S. Patent No. 6,001,858 to Sirinyan et al. (“Sirinyan”) and U.S. Patent No. 5,994,331 to

Erdelen et al. ("Erdelen"). Because Applicants have cancelled claims 9-12 and 16-17, these rejections are now moot.

Furthermore, new claims 21-23 are patentable over the cited art because Dorn does not teach or suggest composition for the control of acarids comprising synergistic effective amounts of imidacloprid and permethrin. In fact, Dorn only describes the use of agonists and antagonists of active compounds, including imidacloprid, for the non-systemic control of parasitic insects such as lice, flies and fleas. Lice, flies and fleas are members of the Class Insecta, while new claims 21-23 are directed to compositions for the control of acarids which are members of the Class Arachnida. As the Dorn reference describes the use of agonists and antagonists for the control of insects, one of ordinary skill in the art would not be motivated, based on either the Dorn reference or based on background knowledge in the art, to create a composition for the control of acarids comprising synergist effective amounts of permethrin and imidacloprid.

One skilled in the art would not find it obvious to combine the imidacloprid and permethrin to achieve a composition for treating acarids, given that imidacloprid alone has no appreciable activity against acarids and permethrin alone generally has limited activity against acarids. Accordingly, one skilled in the art would not expect the addition of an agonist or antagonist of acetylcholine receptors of insects, such as imidacloprid, to improve the efficacy of permethrin in controlling acarids.

The Examiner contends that Dorn teaches adding permethrin as a synergist to imidacloprid. The Applicants respectfully submit that one would not find it obvious to combine these two compounds based on the teachings of Dorn because permethrin is listed as one of many additional ingredients that may be added to the composition taught in Dorn. Also, there is

no discussion of particular synergistic effect between imidacloprid and any of the active ingredients listed in Dorn. In fact, none of the examples in Dorn use a synergist of any kind with imidacloprid.

Because one skilled in the art would not be motivated to form the composition or formulation set forth in claims 21 and 23, these claims are patentable over Dorn. As claim 22 depends from claim 21, it would also be patentable over Dorn, and therefore, Applicants respectfully submit that claims 21-23 are in condition for allowance.

Claims 21-23 are also patentable over Dorn in view of Erdelen and Sirinyan. Erdelen and Sirinyan, like Dorn, focus on agonists and antagonists of acetylcholine receptors for the purpose of treating insects and not acarids. Based on the reasons set forth above with regard to Dorn, claims 21-23 are further patentable over these cited references.

### **Conclusion**

For the reasons stated above, claims are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of claims 21-23. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned by telephone prior to issuing a subsequent action. The Commissioner is hereby authorized to charge any additional amount required (or to credit any overpayment) to Deposit Account No. 19-2112.

Respectfully submitted,

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